

REMARKS

This Amendment is in response to the Office Action dated December 1, 2005 in which claims 1-14 were initially rejected. Applicants respectfully request reconsideration and allowance of all pending claims in view of the above-amendments and the following remarks.

I. CLAIM AMENDMENTS

Independent claim 1 is amended to add that the changeover to the second communication node is implemented according to at least one signaling information transmitted by the transmission device to the receiving terminal through the first communication node, as described on page 19, line 7 to page 20, line 18 of the detailed description. Independent claims 12-14 are also amended to include similar limitations.

In addition, claims 8, 9, 10 and 12 are amended to replace "reception terminal" with "receiving terminal" so that all claims use a consistent term.

II. CLAIM REJECTIONS

Claims 1, 4, 9 and 12-14 were rejected as being anticipated by Jou, U.S. Patent No. 6,925,067.

Claims 2-3, 5-7 and 11 were rejected as being unpatentable over Jou in view of Alard, U.S. Patent No. 6,584,068.

Claim 8 was rejected as being unpatentable over Jou in view of Bohnke, U.S. Patent 6,567,383.

Claim 10 was rejected by the Examiner as being unpatentable over Jou in view of Dolgonos et al., U.S. Publication No. US2002/0147978.

A. Summary of an Embodiment of the Invention

An embodiment of the present invention relates to the data transmission and methods, particularly in a cellular network, and particularly at high-speeds. One or more embodiments are based on the changeover from a first

communication mode, which uses a single carrier modulation for communications management (such as setting up, maintaining and closing of a communication) based on, for example, UMTS channels (in particular a FACH type common channel), to a second communication mode, which uses a multiple carrier modulation (such as the OFDM type with a guard interval or IOTA) for high-speed data transmission.

One or more embodiments of the present invention enable the changeover from a first communication mode using a single carrier modulation to a second communication mode using a multiple carrier modulation, a multiple carrier channel being preferably assigned to communication between a base station and a terminal and not limited to a broadcasting application concerning several terminals. The first and second communication modes are implemented successively and alternately.

B. Jou

Jou relates to a method for transmitting broadcast information in a multi-carrier communication system, for example of the MC-CDMA type, and in particular a method for synchronization of such a system.

More precisely, the method described in the document proposes to send a synchronization channel (the "Sync Channel") of the multi-carrier system in a 1.25 MHz channel bandwidth, corresponding to a single carrier, and to specify the preferred channels for Sync Channel transmission, for example channels 75, 150 and 225 (col. 4, lines 13-23).

The "Sync Channel" will carry a message (the "Sync Channel Message") indicating to the mobile station the center frequency for a multi-carrier system within a reserved set of frequency bands or the frequency of a single carrier system in the reserved set of frequency bands.

The mobile station will decide whether it will operate in a multi-carrier mode or a single carrier mode, according to its needs or capabilities (col. 7, lines 48-55).

However, Jou does not describe, nor suggest, the implementation of the two communication modes successively and alternately, the first mode using a single carrier modulation and the second mode using a multi-carrier modulation.

On the contrary, in the Jou document, once the synchronization is made, a communication mode is chosen for the whole communication session and there is no changeover from the first communication mode to the second communication mode.

Moreover, one can't consider the synchronization (Sync Channel by Jou) as a communication mode, as the Sync Channel doesn't allow the transmission of information between a transmission device and a destination device (setting up, maintaining and closing a communication).

Furthermore, Jou does not disclose that it is the transmission device that indicates to the terminal, for example through the FACH channel corresponding to the first communication mode, to listen to, for example, the OFDM channel associated to the second communication mode.

Therefore, Jou doesn't teach a technique optimizing the use of an available resource in time and in frequency, based on a transmission process particularly well adapted to high-speed data transmission.

As Jou does not disclose that the two communication modes are implemented successively and alternately and that it is the transmission device that indicates to the terminal "signaling information", for example through the FACH channel corresponding to the first communication mode, to listen to, for example, the OFDM channel associated to the second communication mode, claim 1 as currently amended is new and non obvious in view of Jou.

B. Alard, Bohnke and Dolgonos

Moreover, neither Alard, nor Bohnke, nor Dolgonos teaches the use of two communication modes being implemented successively and alternately, such that the changeover to the second communication mode is implemented as a function of at least one signaling information transmitted from the transmitting device to the receiving terminal, according to the first communication mode.

Therefore new claim 1, is new and non-obviousness in view of the documents cited by the Examiner.

III. CONCLUSION

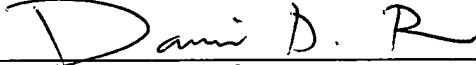
Independent claim 1 includes new and non-obvious features. Claim 1 as currently amended and similarly independent claims 12-14 appear therefore allowable. As a consequence, dependent claims 2-11 are also new and non obvious.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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